

READY SET GREEN!

*Tips,
Techniques,
and
Resources
from
Ontario
Educators*



 Ontario

2007



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The Ministry of Education acknowledges the contributions of schools and school boards from across Ontario whose commitment and creativity have gone into the making of this guide, and the many citizens and organizations that provided public input to support the Working Group on Environmental Education.

We encourage you to contact the schools and boards whose contributions are reflected in these pages, and begin an important province-wide dialogue for the benefit of our students, our province, and our environment.

INTRODUCTION

About Ready, Set, Green!

Ready, Set, Green! was prepared by the Ontario Ministry of Education to support effective environmental education and environmentally sound practices in Ontario schools. Based on current programs and practices in schools and boards across the province, *Ready, Set, Green!* is intended to stimulate discussion of this increasingly important issue, and provide practical tools and strategies that can be put to use in boards, schools, and communities.

WHY THIS GUIDE WAS DEVELOPED

Ready, Set, Green! was developed in response to the recommendations of the Working Group on Environmental Education, chaired by Dr. Roberta Bondar, which presented its report to the Curriculum Council of the Ministry of Education in the spring of 2007. This report, *Shaping Our Schools, Shaping Our Future*, which can be found on the ministry website at www.edu.gov.on.ca, put forward the following definition of environmental education for Ontario schools:

Environmental education is education about the environment, for the environment, and in the environment that promotes an understanding of, rich and active experience in, and an appreciation for the dynamic interactions of:

- the earth's physical and biological systems;
- the dependency of our social and economic systems on these natural systems;
- the scientific and human dimensions of environmental issues;
- the positive and negative consequences, both intended and unintended, of the interactions between human-created and natural systems.

This guide, along with *Shaping Our Schools, Shaping Our Future* and the resources it lists, provides a starting point for implementing this vision of environmental education in our schools.

WHO THIS GUIDE IS FOR

This guide is intended for teachers, principals, and other educators in elementary and secondary schools and district school boards. It will also be of interest to school councils, parents, and community members, who play a valuable role as partners in Ontario's education system and help to shape our schools and communities.

WHAT THE GUIDE CONTAINS

Ready, Set, Green! is a collection of tips, techniques, and resources that have been used by Ontario educators. The guide includes a wealth of information on the practices of school boards across Ontario and a broad spectrum of current approaches. The practices discussed in this guide represent only a sample of the many initiatives that have been developed by boards across the province.

In this guide, you will find:**IDEA BANK: Successful Practices**

A collection of practices from Ontario schools and boards focusing on:

- building natural habitats and green spaces;
- developing partnerships for environmental programs and projects;
- engaging students in research, monitoring, and measurement;
- harnessing the competitive spirit as a motivational tool;
- empowering students to effect positive change;
- building leadership;
- building relationships in the community.

MINDJOGGER: Put On Your Creativity Glasses

A list of environmental project ideas and activities from Ontario schools that are quick, easy, and fun, and a set of “creativity glasses” that will help you generate dozens of great ideas for your school or classroom.

TOOLBOX: Resources You Can Use

Ready-made resources you may find useful in developing lesson plans, school and board programs, and courses, including:

- government websites related to the environment;
- a sampling of programs and organizations that provide environmental connections for Ontario school boards;
- locally developed credit courses from Ontario school boards;
- Specialist High Skills Majors from some Ontario school boards.

SOUNDING BOARD: Send Us Your Great Ideas!

Do you have a program or practice you think Ontario educators would like to hear about? We want to hear from you! Use this form to send or email us your ideas, and share your expertise with educators across the province.

IDEA BANK

Successful Practices

Environmental education is alive in Ontario schools!

Here is just a small sampling of the many innovative projects and programs that have been developed by schools and district school boards across the province.

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Dream It... Build It!

The Chamberlain Trail

Supported by a grant from TD Friends of the Environment and assisted by the local conservation authority and Parks Canada, Gore Hill Public School created a beautiful two-acre natural sanctuary containing a large shallow wetland, a prairie grass/wildflower hill, and a woodlot featuring the Chamberlain Trail, named in memory of a special teacher, Carol Chamberlain. Many improvements have since been made to the site, including a unique "floating classroom" which projects over the wetland so that teachers and students have access to the water for teaching and learning.

*Gore Hill Public School, Leamington
Greater Essex County District School Board*

Green for Shade

Thanks to a grant from the partnership program of the City of Ottawa, École élémentaire publique de Kanata is greening its schoolyard by planting trees, shrubs, and flowers. The project will create shaded areas in the yard, along with green spaces and a natural habitat for birds and butterflies, and will serve as an outdoor education classroom.

*École élémentaire publique de Kanata, Kanata
Conseil des écoles publiques de l'Est de l'Ontario*

Mike Holmes – Approved

Students from Carlton Place High School and Almonte and District High School received a unique seal of approval for their environmentally friendly building practices from Mike Holmes, star of the TV series dedicated to fixing up botched work by contractors. Speaking at a presentation ceremony during which the students and their teachers were honoured with Healthy Housing Recognition certificates from the Canada Mortgage and Housing Corporation (CMHC), Holmes praised the project as an example of how we can prepare the next generation of contractors for the building practices of tomorrow. The three-credit cooperative education project, run in partnership with Halliday Homes of Carlton Place and the Lanark and Leeds Home Builders Association, taught students

about environmentally friendly construction practices in the most practical way possible – by building a home. The nine-month project resulted in the completion of an environmentally friendly “Envirohome” in Carlton Place that is at least 15 per cent more energy efficient than a standard R2000 home.

*Carlton Place High School, Carlton Place
Almonte and District High School, Almonte
Upper Canada District School Board*

Islands of Green

Supported by grants and the results of its fundraising efforts, Colborne Central School has created what it calls “islands of green” in underutilized areas of the school grounds, to boost its windbreak capacity and increase plant diversity. The new landscaping has made the yard a more kid-friendly space, and provides a wonderful welcome for visitors to the school.

*Colborne Central School, Goderich
Avon Maitland District School Board*

Smart Business

In an effort to teach real-world business skills and demonstrate environmental responsibility, the Limestone District School Board launched Enviroworks, a used building-materials store owned by the board and operated by students. The goal of the business is to divert construction and demolition waste from Kingston’s landfills. Doors, windows, bathtubs, sinks, and building materials are obtained from households and contractors, and sold for reuse. Students gain valuable experience in many aspects of business operation and divert over 70 tonnes of materials from local landfill sites every year.

Limestone District School Board

Tranquility Trail

The new Tranquility Trail created by Newcastle’s St. Francis of Assisi Elementary School includes two ponds, a woodchip walkway, a log seating area, plants, and bird feeders and houses. Located behind the school in a fenced-in area, the trail will be used to integrate outdoor education into the curriculum, fostering a love of nature among students and engaging them in thinking about the natural world, conserving habitat, and environmental stewardship.

*St. Francis of Assisi Elementary School, Newcastle
Peterborough, Victoria, Northumberland and Clarington Catholic District School Board*

Working on the Inside...Outside

J.R. Henderson Public School initiated an extensive yard revitalization program called "Creating a Happy, Healthy Community Inside and Out" which has resulted in the completion of a Peace Park, revitalization of the school's front yard, and the installation of a fitness trail with exercise stations placed at intervals along the trail.

*J.R. Henderson Public School, Kingston
Limestone District School Board*

Flexible Outdoor Programming

The Camp Korah Education Centre has adopted a flexible programming schedule to meet the needs of teachers and students in the Huron-Superior Catholic District School Board. The centre, located on 180 acres in Sault Ste. Marie, offers both scheduled programs and on-demand programs that can be booked by individual teachers. Scheduled programs include Orienteering and Tree Identification (Fall), Cross-Country Skiing, Snowshoeing, and Winter Survival (Winter), and a Habitat and Community Science Day (Spring). Among on-demand programs are Soils in the Environment, Pioneer Christmas, Comparing Ecosystems, Introduction to Orienteering, and flexible outdoor activity days.

Huron-Superior Catholic District School Board

Power Up!

Centre Dufferin District High School in Shelburne chose Earth Day to unveil what was the first solar- and wind-powered renewable energy system to be installed at an Ontario secondary school. The project began with the donation of a one-kilowatt wind turbine and 12 photovoltaic solar panels to the school by the Power Up Renewable Energy Co-operative, a local community group, which also provided the expertise to set up and engineer the installation. Students and staff dismantled the wind turbine at its original location and helped re-erect it on the school roof. The school's construction class built the supports needed for the solar panels and catwalks to protect the roof. Students in physics classes are monitoring the energy system on an ongoing basis, conducting tours for other students and members of the community, collecting data, and gaining valuable hands-on experience with a working renewable energy system.

*Centre Dufferin District High School, Shelburne
Upper Grand District School Board*

New School a LEED Prospect

Student achievement and environmental sustainability are the driving forces behind Midland's newest elementary school, designed as a community showcase to demonstrate high standards for the greening of institutions. The Simcoe County District School

Board is hopeful that the unique design features of Mundy's Bay Public School will merit a LEED Gold Certification, awarded to recognize the environmental sustainability of building designs. The new school reflects leading-edge concepts in site design, water efficiency, energy efficiency, materials selection, indoor environmental quality, and design innovation.

Simcoe County District School Board

Nature's Shelter

When a new school, Our Lady of the Way School, was built in Stratton, school staff and students discovered that its location in an open area and the cold northwesterly winds combined to make winter recesses a chilling experience. The school has subsequently planted some 3,000 Jack pine, white spruce, and cedar trees around the perimeter, creating not only a welcome windbreak for cold winter days, but also a natural setting which is now used for environmental studies.

*Our Lady of the Way, Stratton
Northwest Catholic District School Board*

Building Community

The Niagara Catholic District School Board's Spiritual Centre Outdoor Education Program (SCOEP) is a three-day residential program that brings students, staff, and volunteers together as a community and allows them to deepen their faith. Through prayer, cooperative games, drama, journal writing, creation walks, and small- and large-group interaction and discussion, students develop a deeper relationship with themselves, others, the environment, and God.

Niagara Catholic District School Board

Alumni Team Up with Students

Students in the Geoventure program at Moira Secondary School teamed up with alumni of the program to build a wheelchair-accessible trail at the Prince Edward Point Bird Observatory. Geoventure offers Moira students in Grade 10 the opportunity to study English, science, physical education, and civics/careers in an integrated program, with emphasis on community service. The trail was created in memory of John Rymes, husband of a former Geoventure teacher and a major supporter of the program.

*Moira Secondary School, Belleville
Hastings and Prince Edward District School Board*

Partnering for Success

Audit Yields EcoSchools Silver Medal

Lanark's Maple Grove Public School has been recognized as a certified Silver Medal EcoSchool for taking major steps towards reducing its environmental footprint. The honour was granted after Maple Grove underwent an extensive environmental audit and implemented a greening plan which included improved water conservation and waste diversion programs, and efforts to make the school more energy efficient. Improvements made as a result of the audit include:

- *purchasing of energy-efficient appliances by the school-based day care;*
- *keeping windows closed and ensuring that the space around vents is kept unobstructed;*
- *regular checking of mechanical equipment by custodial staff to avoid wasting electricity;*
- *ensuring that lights and computers are turned off when not in use;*
- *holding waste-free-lunch weeks.*

The process has helped students deepen their understanding of environmental issues through hands-on learning. For example, students have conducted audits of water usage, measuring flow rates of water in classrooms and then converting the information into metric and graphical form. Students at each grade level are focusing on different aspects of the greening program:

Grades 3 and 4: Biodiversity

Grades 4 and 5: Energy conservation

Grades 6 and 7: Waste reduction and recycling

Grades 7 and 8: Water conservation

*Maple Grove Public School, Lanark
Upper Canada District School Board*

Recognizing Energy Conservation

The Thames Valley District School Board was recognized by the Ontario Power Authority for outstanding achievements in reducing energy consumption through Ameresco's

Better Schools Partnership Program. The Better Schools project at Thames Valley encompasses 197 buildings and 229 portables for a total of 10 million square feet of space, spread out over a geographical area covering almost 7,000 square kilometres of southwestern Ontario. As of February 2007, the board had reduced harmful carbon dioxide emissions by more than 26,000 metric tonnes and conserved over 386 million litres of water.

Thames Valley District School Board

Sponsorship Supports Clean-up

Through the support of five sponsor organizations, the Great Haileybury Clean-up has grown from an idea to an annual event. The annual clean-up of the shores of the Haileybury River by students from École élémentaire publique des Navigateurs was supported by a local taxi company, along with Tim Hortons, Pizza Pizza, and Wendy's, and has been featured on *Panorama*, a TFO weekly television program.

*École élémentaire publique des Navigateurs, Haileybury
Conseil scolaire de district du Nord-Est de l'Ontario*

Getting an Energy Education

Some 1,200 Grade 5 students are benefiting from an energy education program developed by PowerStream, the largest electric utility in York Region. Through the program, participating schools in York Region District School Board and York Catholic District School Board are receiving a variety of learning resources that will enable teachers and students to complete energy reviews and action plans, as well as energy toolkits that students can use at home with their parents. The program also includes professional development for teachers and visits to the Kortright Centre for Conservation.

*York Region District School Board
York Catholic District School Board*

UNESCO Accreditation: Ontario Firsts

Since 2001, the Bruce Peninsula Biosphere Association has been exploring opportunities for local schools to join the UNESCO Associated Schools Program Network, known as ASPnet. This international network of schools includes more than 7,000 educational institutions in 175 countries committed to the ideals of UNESCO. Through the network, students explore issues relevant to their own environment in a more global context, such as:

- world concerns and the role of the United Nations;
- human rights, democracy, and tolerance;
- intercultural learning;
- environmental concerns.

After exceeding the expectations of the Canadian Commission for UNESCO, Bruce Peninsula District School and St. Edmund's Public School became the first schools in Ontario to qualify as candidate ASPnet schools, in 2003. Cape Croker Elementary School subsequently joined the program to become one of the first Aboriginal schools in Canada to participate in ASPnet. The ongoing partnership between these schools, the Bruce Peninsula Biosphere Association, and the local community has served as a unique model among ASPnet schools in Canada, and has gained significant national and international attention.

*Bruce Peninsula District School, Lion's Head
St. Edmund's Public School, Tobermory
Cape Croker Elementary School, MacGregor Harbour
Bluewater District School Board*

Walking in Someone Else's Shoes

Students at Hillcrest Public School invited a guest speaker from the Aboriginal community to talk about how life in the community is affected by the environment. Students then created footwear representative of various regions, such as mukluks, snowshoes, moccasins, rubber boots, cowboy boots, hiking boots, and stilettos, and talked about what kinds of footwear are appropriate for a particular region.

*Hillcrest Public School, Orillia
Simcoe County District School Board*

Helping Hands in Action

A number of schools in Chatham-Kent have benefited from the Helping Hands in Action initiative of Union Gas, which helps refurbish landscaping; construct playground areas, gazebos, camp shelters, and walking trails; and plant trees in community parks. Chatham-Kent schools whose students, staff, and parents have worked with Union Gas employees and retirees include Tecumseh Public School, Chatham-Kent Secondary School, and King George VI Public School.

Chatham-Kent District School Board

You're Never Too Young...

Although they are only in Grades 7 and 8, students at Usborne Central Public School in Exeter are doing original research into soil conservation and nutrient management. This interdisciplinary project, called "Food Production and Soil Management", provided a hands-on, curriculum-based learning experience as students researched soil, nutrient, and water management practices and sustainable food and crop production through practical experiments and original labs and research. Funded jointly by AgCare and

Land Improvement Contractors of Ontario (LICO), and run with materials and assistance from Ontario Agri-Food Education (OAFE) and Ausable Bayfield Conservation Authority (ABCA). The program also benefited from many guest speakers, such as conservation specialist Matt Redmond, who visited the school to teach students about ecosystems management, sustainable food and crop production practices, and impacts on watershed species. Students presented their research results at an open house event, where they were honoured with a certificate by the ABCA.

*Usborne Central Public School, Exeter
Avon Maitland District School Board*

Eco-Recognition

The Toronto Catholic District School Board celebrated its first 12 certified Ontario EcoSchools, including 3 gold-certified schools and 9 silver-certified schools. The EcoSchools programs focused on energy conservation, waste minimization, ecological literacy, and school-ground greening. EcoSchools recognizes the achievements of participating schools through a certification process that awards a gold, silver, or bronze level of achievement.

Toronto Catholic District School Board

Environmental Education in Action

Students Get Powerwise

In an expansion of its highly successful board-wide energy savings program, the District School Board of Niagara has committed to increasing student involvement with the creation of a curriculum unit, "Let's Be DSBN Powerwise". Through the unit, students assess their classrooms in terms of energy use and cost, and provide suggestions for improvement. Discussions about the impact of energy use on society and the environment are also incorporated into the unit. The board's energy conservation program is a partnership of educators, students, CUPE members, and the board's planning department.

District School Board of Niagara

Students Study Fighting Island

Students from the Greater Essex County District School Board are observing and measuring environmental conditions on Fighting Island, located in the Detroit River. Owned by BASF Corporation, Fighting Island has been recognized by the United Nations Convention on Biological Diversity as a success story, having been revitalized as a wildlife reserve in the midst of an area characterized by heavy industry. Using specially designed lessons, students visiting the island on field trips have the opportunity to study this project first-hand, making precise scientific measurements using handheld computer technology and probes, as well as visual observation and inspection.

Greater Essex County District School Board

Hall Monitors

Students of St. Joseph-Scollard Hall undertook a detailed study of energy use in the school, including a data-gathering questionnaire distributed to teachers, and an assessment of the costs that could be realized through a variety of identified energy-saving measures. The program, called "Go Green, Save on Gold", was designed to

save the school money, contribute to reduced greenhouse emissions, and raise environmental awareness among students.

*St. Joseph-Scollard Hall Secondary School, North Bay
Nipissing-Parry Sound Catholic District School Board*

Water-Quality Monitoring

Grade 10 students from Bruce Peninsula District School have been using a resource developed by the Bruce Peninsula Biosphere Association to monitor the health of inland lakes on the Bruce Peninsula. By comparing the physical, chemical, and biological characteristics of Cameron Lake and Emmett Lake, students have been able to determine the effects of local shoreline development on our aquatic ecosystems. The information collected in this ongoing study constitutes a database that allows the long-term monitoring of changes in ecosystems.

*Bruce Peninsula District School, Lion's Head
Bluewater District School Board*

Student Audit

Cardinal Carter Academy recently undertook a facility-wide waste audit conducted entirely by students. The student auditors went on to make recommendations on waste reduction initiatives at the school and will monitor their implementation.

*Cardinal Carter Academy, Toronto
Toronto Catholic District School Board*

The Competitive Spirit

SEEDS of Greatness

Students of McGregor Easson Public School decided to take the challenge and complete 100 different environmental projects to achieve SEEDS Canada Green School status. Green School status is awarded by SEEDS Canada after classes log and report their project results. By keeping records of their achievements, schools can see the progress they have made towards recognition. McGregor Easson has decided to move towards Jade Status, which requires the completion of 250 projects. Projects completed to date have included everything from litterless lunches to a play about the environment for Kindergarten students.

*McGregor Easson Public School, Ottawa
Ottawa-Carleton District School Board*

Car Designers of the Future

Six Grade 10 and 11 students from École secondaire catholique La Citadelle won a solar car competition organized by the Cornwall and Area Chamber of Commerce. The solar car competition is intended to promote awareness of solar energy and renewable energy among youth. Students had to design and build a vehicle powered by solar panels while taking into account costs, weight, aerodynamics, and efficiency. Each team received \$400 and a starter kit. Participating students also had the opportunity to attend a lecture by Dr. David Suzuki.

*École secondaire catholique La Citadelle, Cornwall
Conseil scolaire de district catholique de l'Est ontarien*

North America Is Watching!

Five students from Waterloo Collegiate Institute headed to New York in 2007 to represent Ontario at the Canon North American Envirothon, North America's largest teen environmental challenge. The five students earned their spot in the competition by winning first place at the Ontario Envirothon competition. Here, they participated in a variety of events including field testing, problem solving, and presentations and quizzes designed to test

their knowledge of environmental science and natural resource management. In addition to their first-place win, they also took away an oral presentation award, rookie team award, and forestry ecostation award, and tied with another school for the wildlife award.

*Waterloo Collegiate Institute, Waterloo
Waterloo Region District School Board*

Environmental Innovators

Attendance at the Ministry of the Environment's Shared Air Summit in June 2007 was just one of the ways two Grade 8 students from St. Anthony's Elementary School were recognized for winning the Environmental Innovator Award at a regional science fair. They mounted a display at the Shared Air Summit and joined other Ontario students at a Youth Roundtable, which developed a "Declaration for Youth by Youth" for the province.

*St. Anthony's Elementary School, Port Hope
Peterborough, Victoria, Northumberland and Clarington Catholic District School Board*

Waste Watch

The Toronto District School Board (TDSB) completed its first 70% Waste Reduction Challenge, co-sponsored by TDSB EcoSchools, the Student Supercouncil, and the City of Toronto. Some 33 schools took up the challenge to meet ambitious waste reduction targets. The result? Two schools achieved a remarkable 90 per cent reduction, and two others reduced their waste by more than 80 per cent.

Toronto District School Board

Recycle a Phone Book... Save a Tree

Students at École catholique St. Michel collected more than 3,000 old phone directories over a period of two months, an accomplishment that earned them a fifth consecutive win in NorthernTel's annual school challenge. The phone books are processed through the region's recycling initiative.

*École catholique St. Michel, New Liskeard
Conseil scolaire de district catholique des Grandes Rivières*

Bookmarks Celebrate Energy Efficiency

Students in the Keewatin-Patricia District School Board were invited to enter a bookmark design contest, celebrating completion of the board's extensive energy retrofit program. The retrofit program, undertaken with Honeywell Building Solutions, was designed to improve the district's energy efficiency, reduce environmental emissions, and update facilities. On completion of the program, some 1,000 students designed bookmarks featuring energy-saving ideas. The grand prize winner received a desktop computer.

Keewatin-Patricia District School Board

The Green Teacher

Every month, staff members of Glebe Collegiate in Ottawa vie for the honour of being recognized as a "Green Teacher". The recipient receives a Green Teacher certificate and a prize, courtesy of EarthCARE, along with a photo and an article which are displayed in the main foyer of the school for a full month. Among the accomplishments of winning staff members have been the following:

- cycling to school every day (even in -40° temperatures!)
- reusing paper coffee trays
- reusing plastic bags by keeping a stack on hand for students
- walking or taking the bus to work
- bringing a litterless lunch
- rescuing wires, batteries, screws, tacks, and hangers from garbage bins, and teaching students how to make robots out of these materials

*Glebe Collegiate Institute, Ottawa
Ottawa-Carleton District School Board*

Board Award

The Ottawa-Carleton District School Board received national recognition from the Canadian Network for Environmental Education and Communication (EECOM) for excellence in environmental education and communication. The award recognized outdoor education programs at the board's Bill Mason and MacSkimming Outdoor Education and Environmental Studies Centres, which provide programs for more than 23,000 Ottawa students each year.

Ottawa-Carleton District School Board

Envirothon Honours

Students from École secondaire catholique L'Escale in Rockland took second place in the Envirothon Franco-Ontarien. Organized by the Prescott-Russell Stewardship, the Envirothon Franco-Ontarien allows students to take part in a hands-on experience in the wild, while learning about environment-related subjects. In addition to competing with other participating schools, students attended a number of workshops, including:

- soils and their importance
- forestry and technology
- identifying trees and marking techniques
- duties of an officer and wildlife conservation laws
- renewable energy

*École secondaire catholique L'Escale, Rockland
Conseil scolaire de district catholique de l'Est ontarien*

Be a Change Agent

Lighting Up Costa Rica

In the remote mountainous southern region of Costa Rica, more than 400 people in 85 homes have received a solar/LED lighting system, thanks to the fundraising efforts of Lasalle Secondary School students. In addition to the annual fundraiser, students from Lasalle and other Rainbow schools travelled to Costa Rica during March break to install the systems.

*Lasalle Secondary School, Sudbury
Rainbow District School Board*

Respecting Mother Earth

Students at Ogden Community School are using Aboriginal themes to explore the concept of respect for Mother Earth. Students share stories that reflect the Aboriginal perspective of respect for the land, and discuss why protecting Mother Earth is so important. Students also identify the reasons people recycle goods and waste products, and make personal connections to reducing, reusing, and recycling at home, in the community, and at school.

*Ogden Community School, Thunder Bay
Thunder Bay District School Board*

Calling On City Hall

Students from Rideau Heights Public School initiated a petition to reduce the use of plastic bags throughout the city of Kingston.

*Rideau Heights Public School, Kingston
Limestone District School Board*

Remote Control

In an innovative pilot project developed by the Toronto Catholic District School Board, computers at 21 participating schools were shut down remotely each night for a two-week period. The remote shutdowns included 2,400 computers and achieved a savings of \$4,200, or 16,900 kilowatt hours. Plans are being considered to expand the program across the entire board.

Toronto Catholic District School Board

Green Graduation

Enterprising students from Central Public School in Grimsby celebrated their completion of Grade 8 by planting 80 trees in their community, one for each graduate. The planting program, suggested by one of the students, was sponsored by the Trees Ontario Foundation.

*Central Public School, Grimsby
District School Board of Niagara*

Batteries by the Pound

The environmental club at École secondaire catholique Algonquin organized a dead battery drive and collected 488 pounds of used batteries throughout the school and in the community.

*École secondaire catholique Algonquin, North Bay
Conseil scolaire de district catholique Franco-Nord*

Earth Week Tips

Students across the Upper Grand District School Board observed Earth Week with a variety of activities including litterless lunches, litter pickups, school ground greening, and the creation of environmental displays and presentations in both elementary and secondary schools. To help schools plan for the week-long celebration, the board provided an Earth Week package including information on how to run a litterless lunch day, a listing of Earth Week events in local communities, suggested daily PA announcements, websites, and other resources.

Upper Grand District School Board

Blended Bicycles

The "Blended Bicycles" program, launched at three Waterloo-area Catholic schools, provides students with a hands-on learning experience while diverting bicycles from the region's landfill. Through the program, students distribute refurbished bicycles to the community.

*St. Mary's High School, Kitchener
St. Benedict Catholic Secondary School, Cambridge
St. David Catholic Secondary School, Waterloo
Waterloo Catholic District School Board*

Highway Patrol

In an annual project begun some 10 years ago, students of Our Lady of the Way, along with staff and parent volunteers, clean up a four-kilometre stretch of highway east and west of Stratton, where the school is located. The event takes place each year in late spring.

*Our Lady of the Way, Stratton
Northwest Catholic District School Board*

Schoolyard Gardeners

At Winchester Public School, a partnership with Green Thumbs/Growing Kids has led to summer programs that bring families, children, and youth into the garden. Operating in a number of Toronto sites, Green Thumbs/Growing Kids is designed to serve multicultural and lower-income communities, supporting food access, culturally appropriate foods, and better nutrition for children. A drop-in evening program for families, which is advertised in June throughout the school, runs through the summer at Winchester. In exchange for produce to take home, families are asked to help in the garden and to bring a bag of organic waste to feed the composter.

*Winchester Public School, Toronto
Toronto District School Board*

It's All About Leadership

Environmentally Friendly B.E.A.R.

Over the past four years, students in Ridgemont High School's B.E.A.R. (Beautification & Environmental Association of Ridgemont) program have contributed to the protection of natural spaces in the Ottawa area, as well as in their own school and local communities. Student members of B.E.A.R. keep up to date on environmental issues by attending meetings, workshops, and conferences, and act as role models for students and community members. B.E.A.R. has encouraged, led, and contributed to numerous environmental initiatives, either directly by cleaning up green spaces or indirectly by raising money for environmental causes. B.E.A.R. programs have included:

- school-wide recycling
- reuse of the other side of posters
- greened classrooms
- dead battery collection
- ink cartridge collection
- cell phone battery collection
- participation in local Ottawa initiatives
- fundraising through an annual Frisbee tournament and sales of calendars and sunflowers

*Ridgemont High School, Ottawa
Ottawa-Carleton District School Board*

Eco-Camp Builds Leaders

York Region District School Board offers an annual Eco-Camp at the Shadow Lake Centre focused on building leadership skills. Students and teachers from as many as 16 schools have participated each year. They study ecosystems, learn leadership skills, and then form Eco-Action teams to lead their schools in environmental projects throughout the year. The program provides a three-day, two-night intensive camp experience.

York Region District School Board

Building a Community of Leaders

The Halton District School Board's Bronte Creek Project is a four-credit program designed to provide students with the opportunity to create a strong community of individuals dedicated to developing the knowledge, skills, and sense of adventure that will enable them to be effective environmental leaders. Students in the program not only learn basic ecology and study environmental issues, but also share what they learn by teaching the Earthkeepers program to younger children.

Halton District School Board

It's Eco-Logical

École secondaire catholique de Hearst has created an environmental club called "École-Logique" which recycles everything from paper, cans, and plastic water bottles to printer cartridges.

*École secondaire catholique de Hearst, Hearst
Conseil scolaire de district catholique des Grandes Rivières*

It's a School-Wide Effort

When Frenchman's Bay Public School established an Environmental Committee, a decision was made to include three students from every class. This ensures that the entire school is aware of, and involved in, recycling and conservation efforts.

*Frenchman's Bay Public School, Pickering
Durham District School Board*

Green School Opening

The Rainbow District School Board's newest school has been designed as a flagship school for environmental efficiency and stewardship. Located in Val Caron near Sudbury, Valley View Public School incorporates national Go Green environmental certification principles – industry best practices for resource consumption, waste management, building materials, the interior environment, and occupant awareness. Among its many innovative features is a geothermal energy system that provides four units of energy from the ground for every unit of energy purchased from conventional sources.

Rainbow District School Board

Eco-Friendly Travel

Students of Christian Island Elementary School have studied the impact of adventure travel and eco-tourism on the indigenous people of Georgian Bay. Students then designed an environmentally positive eco-tourism experience for the region.

*Christian Island Elementary School
Beausoleil First Nation*

The Green Team

Armadale Public School in Markham has created a "Green Team" which is responsible for recycling activities at the school. Recycling bins have been placed in all areas of the school, and Green Team members transfer the contents of these school bins to a main outside bin twice a week. The Green Team concept is integrated with the school's geography program.

*Armadale Public School, Markham
York Region District School Board*

EcoKids

St. Paul Elementary School has a large group of students called "EcoKids", who regularly empty recycling bins; make posters and murals; write, speak, and make announcements about the environment; and help to monitor the school's progress.

*St. Paul Elementary School, Toronto
Toronto Catholic District School Board*

Join the Club!

Students at Rideau Public School have begun an Environmental Club promoting the three Rs – reduce, reuse, recycle.

*Rideau Public School, Kingston
Limestone District School Board*

Keeping the Environment Top-of-Mind

Carruthers Creek Public School has created a Recycling Team and a Composting Team who remove recycling and composting materials from classrooms every day. To keep the environment top-of-mind, members of the school's Environmental Club also make daily announcements to the school, reporting facts and other interesting information to encourage waste reduction.

*Carruthers Creek Public School, Ajax
Durham District School Board*

Adult Learners Go Green Too

Overland Learning Centre is a large adult learning centre in Toronto that attracts adults and seniors from across the city, including many new Canadians taking ESL classes. Instructors at the centre saw an opportunity to build environmental awareness, and created the Overland Eco-Team. The team has undertaken many initiatives including a Waste Reduction Week program with guest speakers, posters, and curriculum focused

on recycling and reducing Toronto's garbage. The Eco-Team also holds an annual Earth Day clean-up contest. Classes form teams, and – armed with gloves, rakes, and bags – compete to see who can collect the most litter and debris left on the schoolyard as the winter snow melts. The event ends with prizes and a celebratory barbecue. Organizers report that the program not only engages adult learners, but also helps to build positive community relationships.

*Overland Learning Centre, North York
Toronto District School Board*

TWIGS: Leadership in Action

TWIGS (Those Who Initiate Greener Schools) members have played a major leadership role at Ottawa's Glebe Collegiate. Among many unique initiatives have been the following:

- a campaign encouraging students and staff to deposit their pop tabs into containers, designed as a fundraiser to support the purchase of assistive devices that would allow developmentally disabled students to participate in field trips and community walks
- the creation of a garden green space
- a seasonal lights swap, exchanging incandescent bulbs in the community with LED lights

*Glebe Collegiate Institute, Ottawa
Ottawa-Carleton District School Board*

Many Students...One Pledge

Charles Gordon Senior Public School has taken a unique approach to making the first R – reduce – an important part of school life. The school has developed a "Pledge for the Environment", to be signed by everyone in the school community, including parents. In order to develop the pledge, two students from each class – the school's Eco-Reps – consulted with teachers, support staff, the school council, and the administration and created text that was endorsed by the entire school. The pledge is designed to educate students about global environmental issues by identifying very specific individual actions that can make a difference. The actions are also aligned with EcoSchools waste minimization and energy standards.

*Charles Gordon Senior Public School, Toronto
Toronto District School Board*

A Pledge for the Environment

1. I will reduce my garbage

- I will bring a litterless lunch, for example, use reusable containers to store my food, try to bring food that doesn't need to be wrapped.
- I will use recyclable or reusable materials as much as I can.
- I will recycle before putting anything in the garbage can.
- I will agree not to litter and to dispose of any garbage properly.
- I will politely ask people not to litter if I see them doing so. I will take on responsibility, and if someone tells me that I should not litter, I will pick up my litter and put it in its place.
- I will dispose of dead batteries properly and try to use rechargeable batteries.
- I will do monthly clean-ups of the schoolyard.

2. I will reduce my air pollution

- I will try to use alternative methods that are more environmentally friendly to get to school, for example, taking the bus, carpooling, riding a bike, walking.

3. I will be a responsible photocopier (to reduce my energy and paper consumption)

- I will use newsprint paper as much as I can. It uses less wood fibre per page and can be put into the Riso printing machine, which uses less energy to make copies.
- I will reduce/eliminate the use of coloured paper when I cannot use newsprint. I will try to use white paper instead.
- I will use both sides of the paper as much as possible. I will also reuse paper that has been used on only one side.
- After I have finished using both sides of the paper, I will recycle it.
- I will not put paper in the garbage, ever.

4. I will reduce my energy consumption

- When nobody is in a room, I will turn the lights off.
- I will also try to use compact fluorescent light bulbs at home, as they save energy.
- I will turn off my computer monitor when I am not using it.

*Charles Gordon Senior Public School, Toronto
Toronto District School Board*

Meeting the Challenge

Nine student ambassadors from Stirling Primary and Junior Schools are encouraging others to join in the challenge for a better environment. Projects completed to date include the following:

- a poster contest that encouraged the participation of all students
- blue boxes delivered to each classroom – for paper and plastic – to help with on-the-spot sorting
- presentations made to other students on the school goal of enhanced recycling and the benefits of garbage reduction

*Stirling Primary and Junior Schools, Stirling
Hastings and Prince Edward District School Board*

Community Ambassadors

Children's Water Festival

The Grey-Bruce Children's Water Festival is an event that cultivates an understanding and appreciation of the water we use and the environment in which we live. Each year secondary students from Bruce Peninsula District School attend the event as mentors to teach Grade 4 students about the world's freshwater resources.

*Bruce Peninsula District School, Lion's Head
Bluewater District School Board*

Seventh-Generation Stewardship

Through the Aboriginal concept of Seventh-Generation Stewardship (taking care of Mother Earth), students at St. Martin Catholic Elementary School explore the importance of water and the consequences of not taking care of water. Using the Indian and Northern Affairs Canada resource *Water Is a Treasure!*, students discover the Aboriginal concept of seventh-generation stewardship and responsibilities to the land, to the animals, and to the air and water for future generations. Students also develop a plan of action to take care of water in their homes.

*St. Martin Catholic Elementary School, Thunder Bay
Thunder Bay Catholic District School Board*

Honours from the Mayor

École élémentaire catholique Sainte-Thérèse was honoured by the Mayor of Cornwall for its exemplary recycling program. The school recycles cardboard, paper, cans, glass, plastic, batteries, ink cartridges, and light bulbs. It also uses vermicomposting for its fruit and vegetable waste matter.

*École élémentaire catholique Sainte-Thérèse, Cornwall
Conseil scolaire de district catholique de l'Est ontarien*

Rainbow Schools Showcase

A number of Rainbow District School Board schools have showcased their environmental initiatives at Sudbury's annual Earth Day Festival. Schools displaying their projects and providing educational information to visitors have included:

- Lo-Ellen Park Secondary School, which launched its composting program at the festival, provided information about its annual leaf drive, tree planting, and conservation activities, and introduced visitors to the Home Audit, an interactive tool used to measure energy consumption in the home
- Lasalle Secondary School, which presented a slide show about its work in Costa Rica (see the "Be a Change Agent" section of this guide) and displayed a solar panel lighting system
- Valley View Public School, the first green school in Sudbury, which showcased sustainability measures utilized in its construction
- Chelmsford Valley District Composite School, whose students displayed plants from their own hydroponics lab

Rainbow District School Board

Generating EcoBuzz

The Peel District School Board holds its annual EcoBuzz conference each fall, drawing more than 200 environmentally conscious students. The one-day event is open to Peel District School Board and Dufferin Peel Catholic District School Board students, and is designed to motivate participants to take action to preserve the earth today and for the future. During the event, teachers and students participate in workshops and action planning sessions facilitated by environmental experts.

Peel District School Board

Beyond School Walls

As part of their International Earth Day program, students from École élémentaire Corpus Christi in Oshawa participated in a presentation by the Canadian Auto Workers Union on the importance of looking after the environment. The activity was in support of the school's paper and cardboard recycling program.

*École élémentaire Corpus Christi, Oshawa
Conseil scolaire de district catholique Centre-Sud*

A Public Reminder

When Grade 5 and 6 students at E.J. Sand Public School complained that there was a lack of shade outside their classroom, their teacher decided to encourage the students to take action and provide a lesson in empowerment. The result was a tree-planting ceremony, made possible through the support of the Trees Ontario Foundation. The ceremony was attended by the local MPP and 100 Grade 5 and 6 students, who participated in the planting of five red maple trees on the school grounds. The five trees will serve as a permanent reminder that students can take action and make a difference by nurturing their natural environment.

*E.J. Sand Public School, Thornhill
York Region District School Board*

The Circle of Life

Students at Christian Island Elementary School use resources such as *In the Garden* and *Lessons from Mother Earth* as a stepping-off point for talking about First Nations' perspectives on taking personal responsibility in the circle of life. Students deepen their understanding by participating in a community planting project.

*Christian Island Elementary School
Beausoleil First Nation*

Student Workshops

Students from École secondaire catholique de Casselman prepared and presented workshops on the preservation of water at the Casselman Water Festival, organized by l'Institut des sciences environnementales du fleuve St-Laurent, a research centre located in Cornwall.

*École secondaire catholique de Casselman, Casselman
Conseil scolaire de district catholique de l'Est ontarien*

Environmental Road Show

Heart Lake Secondary School's Environment Club took a unique approach to building environmental awareness after some of its members received training at the Otesha Project in Ottawa, a youth-oriented sustainable living initiative. They subsequently toured schools to perform comedic theatrical skits to educate audiences about the connections between global environmental problems and everyday actions.

*Heart Lake Secondary School, Brampton
Peel District School Board*

Water Festival Provides Hands-on Learning

The Peterborough Children's Water Festival helps shape children's attitudes about the importance of water in their lives and its use, consumption, and protection. Through a series of 34 interactive learning stations, students in Grades 3 to 6 explore the concepts of water conservation, water attitudes, water technology, water protection, and water science.

Peterborough, Victoria, Northumberland and Clarington Catholic District School Board

Community EnviroFair

Members of Glebe Collegiate's environmental club took the opportunity to promote their "Reduce and Reuse" theme at the Glebe Community EnviroFair, a popular event which is well attended by area residents. Committee members took turns explaining features of their school program to visitors, including:

- litterless lunches
- a perennial flower garden
- an LED seasonal lights exchange
- fundraising to purchase bike racks and encourage students to bike to school
- Glebe water bottles, which are sold to encourage reuse
- the school's "staff member of the month" program

*Glebe Collegiate Institute, Ottawa
Ottawa-Carleton District School Board*

MINDJOGGER

Put On Your Creativity Glasses

Looking for great ideas? You'll find inspiration in this collection of 30 quick, simple, and fun activities and projects contributed by schools across the province. You can adapt these ideas to your school or classroom, or use them as a creative springboard to invent your own!

CREATIVITY GLASSES

USER MANUAL

Your creativity glasses come with many interchangeable lenses you can use to view each of these ideas from a different perspective and generate dozens more. While pondering each of these great ideas – and the projects described elsewhere in this guide – ask yourself:

How could we...

- Adapt the same idea to a different purpose?
 - Add this technique to a program or project we've done in the past?
 - Expand the idea? Increase the scope or scale in some way?
 - Contract it? Break it into pieces? Eliminate something?
 - Do it in a different place? Time?
 - Substitute another process we like to achieve the same goal?
 - Rearrange it in some way? Change the rules? Change the goals?
 - Do it in reverse? Start at the end and work backwards?
 - Blend two or more of these ideas together?
 - Make the idea more exciting? Tailor it to our classroom?
 - Change the who, what, where, when, why, and how?
1. Decorate paper bags at the local grocery store to distribute on Earth Day weekend, so that every shopper goes home with a custom masterpiece and is encouraged to switch from plastic to paper bags (*D.M. Eagle Public School, Greater Essex County District School Board*)
 2. Hold a contest to name a school program, project, or publication related to the environment (*École élémentaire publique des Navigateurs, Conseil scolaire de district du Nord-Est de l'Ontario*)
 3. Record the names of students who bring a waste-free lunch every Friday, and award prizes at the end of the year (*J.E. Benson Public School, Greater Essex County District School Board*)
 4. Take a tour of a recycling plant (*Ridgeway Crystal Beach High School, District School Board of Niagara*)

5. Create a "Watt Busters" team of green heroes at your school who tape signs on light switches, reminding everyone to turn out the lights and warning that people will "get busted" if they leave the lights on (*St. Anne Catholic School, Ottawa Catholic District School Board*)
6. In a predator/prey simulation game, each student draws the name of an animal – such as a wolf or rabbit – and then plays out the role of the animal he or she has picked (*Our Lady of the Way, Northwest Catholic District School Board*)
7. Have classes compete in a contest to see who can collect – from both school and home – the largest number of plastic water bottles or pop bottles for recycling (*Argyle Public School, Near North District School Board*)
8. Dedicate your own day, week, or month in the school to highlight environmental education (*École élémentaire Académie de la Tamise, Conseil scolaire de district du Centre Sud-Ouest*)
9. Write an article for the school newsletter about waste reduction and food packaging to help readers learn to reduce garbage (*Bath Public School, Limestone District School Board*)
10. Challenge all students who live within walking distance to walk to and from school, saving the environment and enjoying a healthy lifestyle at the same time (*St. Anne Catholic Elementary School, Waterloo Catholic District School Board*)
11. Do a daily collection of fine paper, a weekly collection of plastic containers, glass bottles, and cans, and a weekly yard clean-up (*St. Mark Elementary School, Hamilton Wentworth Catholic District School Board*)
12. Make use of natural light, use half of the lights when possible, reduce the number of refrigerators in the school, and encourage people to make fewer photocopies (*Pleasant View Junior High School, Toronto District School Board*)
13. Sell litterless lunch kits at the beginning of the school year (*Terry Fox Elementary School, Simcoe County District School Board*)
14. Have students make posters to be placed in the school hallways advertising Waste Reduction Week (*Terry Fox Elementary School, Ottawa-Carleton District School Board*)

15. Have an "Energy Hog" in your school who visits classrooms in which the lights are left on when the room is not in use (*Warnica Public School, Simcoe County District School Board*)
16. Give students brightly coloured "Energy Saver" vests to wear, as a visual reminder of the school's energy and waste reduction program (*St. Benedict's Catholic Secondary School, Waterloo Catholic District School Board*)
17. Develop a school code of conduct for students, reflecting respect for the environment (*École Renaissance, Conseil scolaire de district du Nord-Est de l'Ontario*)
18. Have students compile ongoing data on the number of conservation projects completed by the whole school community (*C.R. Judd Public School, Rainbow District School Board*)
19. Bring students and residents together to clean garbage from the local river (*Moirs Secondary School, Hastings and Prince Edward District School Board*)
20. Create a bulletin board "tree" that is bare of leaves, and add a new leaf to record every successfully completed project (*Coe Hill Public School, Hastings and Prince Edward District School Board*)
21. On Earth Day, have students dress up in costumes, made from reused materials, that reflect a "Save the Earth" theme (*Lady Evelyn Alternative School, Ottawa-Carleton District School Board*)
22. Run a local battery collection drive in your community (*Terry Fox Elementary School, Ottawa-Carleton District School Board*)
23. Hold a student poster contest with an environmental theme and display the resulting student work in the school (*École secondaire Carrefour Supérieur-Nord, Conseil scolaire de district du Grand Nord de l'Ontario*)
24. Create a "word wall" to record students' ideas about how to stop climate change and save the environment, now and in the future (*Frederick Banting Alternate School, Ottawa-Carleton District School Board*)

25. "Go Loco": Pipe the song "Loco-Motion" through the school while students dance through the halls, flipping off lights and computers (*Moir Secondary School, Hastings and Prince Edward District School Board*)
26. Create a tree, located in the lobby of the school, on which students can hang their "promises" for the environment (*Sir John A. Macdonald Public School, Hastings and Prince Edward District School Board*)
27. Write a letter to your local MPP about an environmental issue (*Bawating Intermediate Elementary School, Algoma District School Board*)
28. Start a "boomerang" lunch program so that all recyclables, reusables, and unconsumed food are returned home (*Morrish Public School, Toronto District School Board*)
29. Invite a local, regional, or national celebrity to raise awareness of your environmental event (*Carleton Place High School, Upper Canada District School Board*)
30. Partner with your community government in a town or city clean-up (*École secondaire catholique Algonquin, Conseil scolaire de district catholique Franco-Nord*)



TOOLBOX

Resources You Can Use

Looking for more great ideas? In this section you can find government websites related to the environment, learn about locally developed credit courses and Specialist High Skills Major programs that focus on the environment, and discover more than 35 environmental organizations that work with Ontario schools.

Government Websites	39
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Specialist High Skills Major Launch Sites	51

Government Websites

Agriculture and Agri-Food Canada
www.agr.gc.ca

Environment Canada
www.ec.gc.ca

Natural Resources Canada
www.nrcan-rncan.gc.ca

Ontario Ministry of Agriculture,
Food and Rural Affairs
www.omafra.gov.on.ca

Ontario Ministry of Energy
www.energy.gov.on.ca

Ontario Ministry of the Environment
www.ene.gov.on.ca

Ontario Ministry of Health
www.health.gov.on.ca

Ontario Ministry of Natural Resources
www.mnr.gov.on.ca

Environmental Connections

Canadian Wildlife Service

The Canadian Wildlife Service, part of Environment Canada, handles wildlife matters that are the responsibility of the federal government. The Canadian Wildlife Service website provides extensive information and offers groups and individuals the opportunity to become involved in a variety of projects.

www.cws-scf.ec.gc.ca

Center for Great Lakes Environmental Education

The Center for Great Lakes Environmental Education is an informational resource that provides access to Great Lakes educational material and identifies and addresses teacher training needs. The centre's website provides a range of electronic resources and information on additional programs and services.

www.greatlakesed.org

Community Fisheries and Wildlife Involvement Program

The Community Fisheries and Wildlife Involvement Program (CFWIP) of the Ministry of Natural Resources helps individuals, groups, and organizations participate in hands-on fish and wildlife management and conservation activities. The Ministry develops volunteer projects that will improve fish and wildlife in the province and opportunities for outdoor recreation.

www.mnr.gov.on.ca/fishing/cfwip.html

¹ This is a sampling of organizations that have worked with or are currently working with various schools and boards in Ontario. This listing is provided to assist teachers in locating contact information.

Conservation Ontario

Conservation Ontario is the umbrella organization that represents Ontario's 36 conservation authorities. Conservation authorities are local watershed management agencies that deliver services and programs to protect and manage water and other natural resources in partnership with government, landowners, and other organizations.

www.conservation-ontario.on.ca

Council of Outdoor Educators of Ontario

The Council of Outdoor Educators of Ontario (COEO) is a non-profit, volunteer-based organization that promotes outdoor education experiences for people of all ages. It also acts as a professional body for outdoor educators in the province of Ontario.

www.coeo.org

Dearness Environmental Society

The Dearness Environmental Society helps district school boards through the Dearness Conservation Program, which is delivered to school communities both through in-service training and resource materials in a variety of media.

www.dearness.ca

Ducks Unlimited Canada

Ducks Unlimited Canada conserves, restores, and protects wetlands across Canada.

www.ducks.ca

Earth Angels

Earth Angels provides environmental learning experiences for children, schools, and communities across Ontario. It provides a wide variety of programs and resources, which are described on the Earth Angels website.

www.earthangels.ca

Earth Rangers

The Earth Rangers Centre, located in Woodbridge, provides learning programs both on its own site and in schools, has an "Earth Rangers for Kids" website, and offers a wide range of resources for teachers.

www.earthrangers.ca

EarthCARE

EarthCARE is an environmental education program designed to develop students and staff as environmental stewards. In addition to its programs for boards and schools EarthCARE provides a wide variety of lesson plans and other teaching and learning resources on its website.

www.earthcarecanada.com

ecoMentors

ecoMentors trains high school students to deliver one-hour lesson plans to elementary students on a variety of environmental education topics. Teachers interested in locating an ecoMentor can visit the website, which also contains lesson plans and other resources.

www.ecomentors.ca

EcoSchools

Ontario EcoSchools is an environmental education program that addresses both how schools are run and what students learn. It has been designed collaboratively by school boards for school boards to incorporate environmental education, as well as environmentally responsible action, into the school setting. The Ontario EcoSchools website provides a wide range of learning resources and detailed information on how to become involved in the EcoSchools program.

www.yorku.ca/ecoschl

EcoSource

EcoSource is an environmental education organization that provides workshops, resources, and school programs focused on waste reduction and environmental education.

www.ecosource.ca

Evergreen

Evergreen is a non-profit organization that provides expert help and resources to schools across Canada and offers a wide variety of learning resources on its website.

www.evergreen.ca/en/

Green Ontario

Green Ontario provides in-depth conservation information for individuals, along with a directory of conservation organizations and resources for groups and communities.

www.greenontario.org

Harmony Foundation

Harmony Foundation offers publications and programs to promote sustainability in communities and schools, the home and workplace, and internationally. The Harmony Foundation website provides detailed program information and a broad mix of electronic resources.

www.harmonyfdn.ca

IndEco

IndEco's Energy Drill Program, which has been piloted at Milton's Robert Baldwin Public School, provides organizations with action plans to reduce hydro consumption during peak demand periods.

<http://indeco.com/www.nsf/papers/drill>

Institute for Outdoor Education and Environmental Studies

The Institute for Outdoor Education and Environmental Studies offers locally focused outdoor and environmental education experiences for students in Bruce and Grey counties.

www.oec.bwdsb.on.ca

International Walk to School Month

International Walk to School Month, held each year in October, is a global event designed to promote safer streets, healthy habits, and environmental conservation.

www.iwalktoschool.org

Kortright Centre

The Kortright Centre is an environmental and renewable energy education and demonstration centre located in Woodbridge. The centre offers environmental education programs for schools and sustainable technology workshops for the public, trades, and professionals.

www.kortright.org

Learning for a Sustainable Future

Learning for a Sustainable Future is a Canadian organization created to integrate education for sustainable development into the curricula at all grade levels in Canada. Among its many programs and services are forums for youth and extensive resources for teachers.

www.lsf-lst.ca

Ontario Agri-Food Education

Ontario Agri-Food Education offers educational programs and resources to increase awareness of the importance of the agriculture and food system. Its website provides detailed information on a broad range of workshops and resources for teachers and students. One of its recent initiatives includes *Climate Change and You!*, a resource for teachers.

www.oafe.org

Ontario Envirothon

Ontario Envirothon is an interactive environmental education program for youth that is delivered through field trips, resource materials, and competitions at the regional, provincial, and international level.

www.ontarioenvirothon.on.ca

Ontario Science Centre

The Ontario Science Centre provides on-site learning programs and a wide variety of resources for students and teachers.

www.ontariosciencecentre.ca

PITCH-IN CANADA

PITCH-IN CANADA is a national organization that provides volunteer opportunities such as composting and recycling programs, and clean-up programs. It also provides a variety of resources on its website.

www.pitch-in.ca

Roots & Shoots

Roots & Shoots, a program of the Jane Goodall Institute, is a global network that provides youth-oriented service learning projects to promote care and concern for animals, the environment, and the human community.

www.rootsandshoots.org

Science North

Sudbury's Science North offers a broad range of learning programs for students, as well as professional development workshops for teachers. Educators can arrange a school or class visit to the centre or have Science North bring a learning program to the school.

<http://sciencenorth.ca>

Scientists in School

Scientists in School provides a variety of hands-on classroom workshops, as well as professional development programs for teachers, with the aim of giving students a lifelong passion for science and motivating them to consider careers in science and technology.

www.scientistsinschool.ca

SEEDS Foundation

The SEEDS Foundation supports Canadian educators in promoting student literacy and active personal and societal responsibility for energy, sustainability, and the environment, through a variety of programs and services.

www.seedsfoundation.ca

Seeds of Diversity

Seeds of Diversity is a Canadian charitable organization dedicated to the conservation, documentation, and use of public-domain non-hybrid plants of Canadian significance. Together, its members grow, propagate, and distribute over 1,500 varieties of vegetables, fruit, grains, flowers, and herbs.

www.seeds.ca

TD Friends of the Environment Foundation

TD Friends of the Environment Foundation provides funding support for environmental projects in Canada, on a region-by-region basis.

www.td.com/fef

Toronto Zoo Adopt-A-Pond

The Adopt-A-Pond Wetland Conservation Programme provides teachers, students, and community groups with information resources and educational opportunities to conserve, restore, and create wetland habitats.

www.torontozoo.com/AdoptAPond/

Toyota Earth Day Scholarships

The Toyota Earth Day Scholarship Program encourages and rewards graduating high school students and Quebec junior college students who have distinguished themselves through environmental community service, extracurricular and volunteer activities, and academic excellence.

www.earthday.ca/scholarship

Trees for Peace Project

The Trees for Peace program works with students in Lennox & Addington and Frontenac counties to plant trees on farmlands and in conservation areas, recreation parks, and wetlands.

www.alcdsb.on.ca/sites/tfp

Volunteer for Nature

Ontario Nature's Volunteer for Nature program is an out-of-doors volunteer experience designed for people with an interest in biodiversity protection. Individuals and groups can volunteer alongside professional conservationists on hands-on projects such as bird, butterfly, and dragonfly counts, boardwalk building, native tree planting, and seed collection in some of Ontario's most important natural areas.

www.ontarionature.org

Waste Free Lunch Challenge

The Waste Free Lunch Challenge helps Ontario schools to reduce the amount of garbage they produce and to educate students, staff, and parents about waste reduction. Step-by-step instructions for participation are provided on the website.

www.wastefreelunch.com

Waste Reduction Week in Canada

The Waste Reduction Week in Canada website provides resources and contacts to assist communities, schools, and businesses with waste minimization and conservation initiatives.

www.wrwcanda.com

Locally Developed Credit Courses²

Environmental Science

Board: Simcoe County District School Board

Grade: 10

Course type: Open

Provides an understanding of the ecosystems essential for appreciation of the natural world in which we live and upon which we are dependent. Strands are either related to the ecosystem directly (natural resources, structure of ecosystems) or examine a specific aspect of ecosystems in more detail (animal adaptations, plant science, soil science). The course provides hands-on learning experience in field study locations, including monitoring and restorative work.

Environmental Science

Board: Simcoe County District School Board

Grade: 12

Course type: Open

Examines ecological processes and the impact humans have on them. Students learn concepts and theories relating to ecology, stewardship of small watersheds, and the resources of water, soils, and human-produced wastes. Career opportunities related to ecology, land use planning, resource management, and field biology are explored. Emphasis is placed on the practical applications of concepts related directly to students' experiences in their daily lives and in the workplace.

² In cases where students' educational and/or career preparation needs cannot be met by courses authorized by the provincial curriculum policy documents, locally developed credit courses can be created by school boards, subject to the approval of the Ministry of Education

Environmental Science

Board: Bluewater District School Board

Lakehead District School Board

Grade: 11

Course type: College Preparation

Provides an opportunity for students to focus on the scientific principles and skills that are used in environmental science. Emphasis is on the development of an interdisciplinary approach to understanding systems within the biosphere. This course extends the concepts introduced in the Grade 10 science courses and promotes environmentally responsible citizenship. Students explore a range of topics including ecosystem structure and function, terrestrial and aquatic ecology, environmental contamination, and health.

Environmental Stewardship Program

Board: Trillium Lakelands District School Board

Grade: 11

Course type: Workplace Preparation

The Environmental Stewardship Program (ESP) is designed for students who are enthusiastic about employment in an outdoor setting such as forestry, park operations, wildlife management, and tourism including camp, resort, and ski area management. Students earn credits in geography, guidance, and physical education, participate in a wide variety of outdoor activities, and pursue related certification in outdoor/wilderness-related skills.

Field Ecology

Board: Wellington Catholic District School Board

Grade: 11

Course type: University/College Preparation

Develops environmental principles and skills through a focus on topics such as aquatic ecosystems and water resources, waste management, forestry management, and terrestrial ecosystems. The course format involves two days in class and three days of practical experience at an environmental site.

Field Ecology from a Local Perspective

Board: Grand Erie District School Board

Grade: 11

Course type: University/College Preparation

Designed for students who may wish to pursue further studies in the environmental science and conservation areas, this course is designed to help students increase their understanding of ecological concepts and scientific techniques through field work and environmental monitoring. Areas of study include forest ecosystem management, freshwater aquatic environments, fish and wildlife management, and soil science and agriculture.

Forestry

Board: Kawartha Pine Ridge District School Board

Grade: 11

Course type: Workplace Preparation

Focuses on sustainable forestry management, the skills associated with mensuration and silvics, and the ecology of present-day and historical forest types in Canada. Students are introduced to the skills and processes involved in related forest industries, and the development of employment skills in preparation for apprenticeship and training programs. Students gain practical experience in local wooded areas, and also learn about industry standards and codes, health and safety issues, and careers in forestry.

Natural Resource Management

Board: Hastings Prince Edward District School Board

Grade: 9

Course type: Open

Provides in-depth study of local resource management issues and industries. Students integrate hands-on learning with classroom instruction in order to obtain the skills and knowledge needed for future courses, programs, and employment. Emphasis is placed on generating an understanding of local resource management issues and stewardship, and appreciating various points of view regarding particular issues.

Sustainable Living

Board: Waterloo Region District School Board

Grade: 10

Course type: Open

Explores the impact of our lifestyle on the sustainability of the earth's resources and degradation of the environment. The course encourages the development of interpersonal decision-making and practical skills necessary for students to make informed decisions regarding their daily activities and their impact on the environment.

Watershed Monitoring and Management

Board: London District Catholic School Board

Durham District School Board

Grade: 11

Course type: University/College Preparation

Helps students understand the factors that influence watershed health within their community. Students conduct field laboratory work including mapping, chemical and biological monitoring, wildlife inventory, vegetative and soil analysis, and water quality and quantity assessment. Students interpret and assimilate data and observations to prepare watershed management recommendations, and develop a conscientious and accountable attitude towards responsible water and land stewardship.

Specialist High Skills Major Launch Sites

In the 2006–07 school year, 27 school boards were approved by the ministry to launch Specialist High Skills Major (SHSM) programs in five different economic sectors. The SHSM allows students to focus on knowledge and skills that are of particular importance in certain economic sectors, and to obtain certifications recognized in those sectors, as they work towards meeting the requirements for an Ontario Secondary School Diploma (OSSD).

Students who graduate with an SHSM designation on their diploma are prepared for success in a particular sector in the postsecondary destination of their choice, whether it be apprenticeship training, a college or university program, or the workplace. In September 2007, phased implementation of the SHSM was expanded to additional boards approved by the ministry. SHSMs with an environmental focus will be available in the boards identified on the following pages.

Eco-Tourism

Description	Our regional economy relies on the environmental leadership of our youth. This SHSM program includes strenuous outdoor activities and addresses alternative energy and the appreciation, safety, protection, and sustainability of our environment. The Bruce Peninsula District School SHSM is based on a 40-year history of an Outer's program. Grey Highlands Secondary School's program has an environmental stewardship focus.
Number of students	80
Board	Bluewater District School Board Box 190 351 1st Ave N Chesley, ON N0G 1L0
Board contact	Name: Jean Stephenson Title: Student Success Leader Phone: 519-363-2014 ext. 283 Fax: 519-363-3715 Email: jean_stephenson@bwdsb.on.ca
School 1	Bruce Peninsula District School Box 178 5 Moore St Lion's Head, ON N0H 1W0
School contact	Name: Pat Cavan Title: Principal Phone: 519-793-3211 ext. 527 Email: pat_cavan@bwdsb.on.ca
School 2	Grey Highlands Secondary School Box 460 Flesherton, ON N0C 1E0
School contact	Name: Anne MacLaughlin Title: Principal Phone: 519-924-2721 ext. 527 Email: anne_macLaughlin@bwdsb.on.ca
Partners:	
Business/Community	Bruce Trail Association Canadian Coast Guard Duke of Edinburgh Institute for Outdoor Education Parks Canada Sky Generations UNESCO-Peninsula Biosphere
College	Georgian College

Royal Botanical Gardens ECO Studies Program/Bronte Creek Project

Description	<p>ECO Studies is an experiential environmental and earth science education program where students attend classes at Aldershot School and the Royal Botanical Gardens.</p> <p>The Bronte Creek project is an environmental education and leadership program where students work together to teach elementary students a dramatic ecology program.</p>
Number of students	30-40
Board 1	<p>Halton District School Board 2050 Guelph Line Burlington, ON L7R 3Z2</p>
Board 1 contact	<p>Name: Dave Lewis Title: Pathways, Coop & Guidance Coordinator Phone: 905-335-3665 ext. 2225 Fax: 905-332-1891 Email: lewisd@hdsb.ca</p>
Board 2	<p>Halton Catholic District School Board 802 Drury Lane Burlington, ON L7R 2Y2</p>
Board 2 contact	<p>Name: Rob DeRubeis Title: Curriculum Consultant - Technological Studies Phone: 905-623-6314 Fax: 905-632-5417 Email: derubeisr@hcdsb.org</p>
School 1	<p>Aldershot School (RBG ECO Studies) 50 Fairwood Pl W Burlington, ON L7T 1E5</p>
School 2	<p>Gary Allan High School (Bronte Creek Project) 215 Ontario St S Milton, ON L9T 4N5</p>
Additional contact	<p>Name: Kim Wallace Title: Coordinator Phone: 905-335-3663 Fax: 905-332-1891 Email: wallqcek@hdsb.ca</p>
Partners:	
Business/Community	<p>Aldershot Community Council Bronte Creek Conservation Area Conservation Halton and Hamilton Royal Botanical Gardens</p>

Babaamaadozoo-kakendaasowinnan

Description	This program integrates Indigenous culture and environmental knowledge through a combination of instructional and practical experiences. Students are provided with opportunities to develop transferable skills for life and work, facilitated through certification, community networking, and traditional land-based teachings.
Number of students	Approximately 15
Board	Keewatin-Patricia District School Board 100 First Ave W Kenora, ON P9N 3Z7
Board contact	Name: Mary Anne Bishop Title: Student Success Leader Phone: 807-727-3405 Fax: 807-727-1159 Email: maryanne.bishop@kpdsb.on.ca
School	Queen Elizabeth Secondary School Box 548 15 Fair St Sioux Lookout, ON P8T 1A9
School contacts	Name: Darren Lentz Title: Teacher Phone: 807-737-3500 Fax: 807-737-1979 Email: darren.lentz@kpdsb.on.ca Name: Nicole Carbone Title: Teacher Phone: 807-737-3500 Fax: 807-737-1979 Email: nicole.carbone@kpdsb.on.ca
Partners:	
Business/Community	Lac Seul Education Authority Ministry of Natural Resources Northern Nishnawbe Education Council (NNEC)
College	Confederation College
University	Lakehead University

Northern Studies – Conservation, Wildlife Management, and Eco-Tourism

Description	The Northern Studies program prepares students to work in local industries by providing academic skills, career education, certification, and on-the-job training in the fields of eco-tourism, conservation, and wildlife management. Students have a variety of experiences including canoeing, bush survival, organizing a canoe trip, and conducting fish/wildlife surveys and studies.
Number of students	10–15
Board	Superior-Greenstone District School Board Bag A 12 Hemlo Dr Marathon, ON P0T 2E0
Board contact	Name: John Robart Title: Student Success Leader Phone: 807-229-0436 ext. 236 Fax: 807-229-1471 Email: jrobart@sgdsb.on.ca
School	Manitouwadge High School 200 Manitou Rd W Manitouwadge, ON P0T 2C0
School contact	Name: Dan Fairservice Title: Teacher Phone: 807-826-3241 Fax: 807-826-4862 Email: dfairservice@sgdsb.on.ca
Partners: Business/Community	Black River Logging Buchanan Forest Products Canadian Ecology Centre Manitouwadge Economic Development Corporation Ministry of Natural Resources Regional Power Corporation
College	Confederation College

Environmental Sciences and Sustainable Development

Description	This program is designed for students who would like careers in various environmental fields. Our objective is to facilitate access to various occupations by offering theoretical training and enabling students to conduct practical projects in the field in order to apply their knowledge (of biodiesel energy, sustainable development, etc.). These experiences will enable students to make informed choices about their path towards a career in the environmental field.
Number of students	157
Board	Conseil des écoles publiques de l'Est de l'Ontario 2445, boulevard St-Laurent Ottawa, ON K1G 6C3
Board contact	Name: Suzanne Moncion Title: Surintendante de l'éducation au palier secondaire Phone: 613-742-8960 ext. 3845 Fax: 613-742-1012 Email: suzanne.moncion@cepeo.on.ca
School	ÉSP Gisèle-Lalonde 500, boulevard Millennium Orléans, ON K4A 4X3
School contact	Name: Guylaine Ayotte Title: Directrice de l'école Phone: 613-833-0018 ext. 082 Fax: 613-833-3030 Email: guylaine.ayotte@cepeo.on.ca
Partners:	
Business/Community	ARASE Journée mondiale du SIG Projet karyne Scout vélotour
College	La Cité collégiale Collège d'Alfred
University	University of Ottawa

Environmental Sciences

Description	In cooperation with CEPEO, CECLFCE, Collège d'Alfred, La Cité collégiale, and the University of Ottawa, CSDCEO is launching an SHSM in environment. In addition to enabling students to meet the requirements of the OSSD and easing the transition to the four postsecondary destinations, this SHSM will enable students to develop Essential Skills and to have experiences that will enable them to work in the field of environmental sciences.
Number of students	24
Board	Conseil scolaire de district catholique de l'Est ontarien 875 chemin de comté 17 L'Orignal, ON K0B 1K0
Board contact	Name: Céline Cadieux Title: Surintendante de l'Éducation Phone: 613-675-4691 Fax: 613-675-2789 Email: cadice@csdceo.on.ca
School 1	École secondaire catholique régionale de Hawkesbury 572, rue Kitchener Hawkesbury, ON K6A 2P3
School 1 contact	Name: Denis Lanthier Title: Directeur Phone: 613-632-7055 Fax: 613-632-5455 Email: lantde@csdceo.on.ca
School 2	École secondaire catholique L'Escale 1535, avenue du Parc Rockland, ON K4K 1K6
School 2 contact	Name: Denis Tardif Title: Directeur Phone: 613-446-5169 Fax: 613-446-6219 Email: tardde@csdceo.on.ca
Partners:	
Business/Community	Ontario Forestry Association Intendance environnementale de Prescott-Russell [Prescott-Russell Stewardship] L'union des cultivateurs franco-ontariens Société environnementale de Clarence-Rockland Tucker House Renewal Center
College	La Cité collégiale Collège d'Alfred
University	University of Ottawa

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Environmental Education: Great Ideas from Ontario Educators

Do you have a great idea to share? Just mail this form to the Ministry of Education or email us at: readyssetgreen@ontario.ca.

Environmental Education
% Implementation and Review Unit
Curriculum and Assessment Policy Branch
16th Floor, Mowat Block
900 Bay St
Toronto, ON M7A 1L2

Name: _____

School: _____

Address: _____

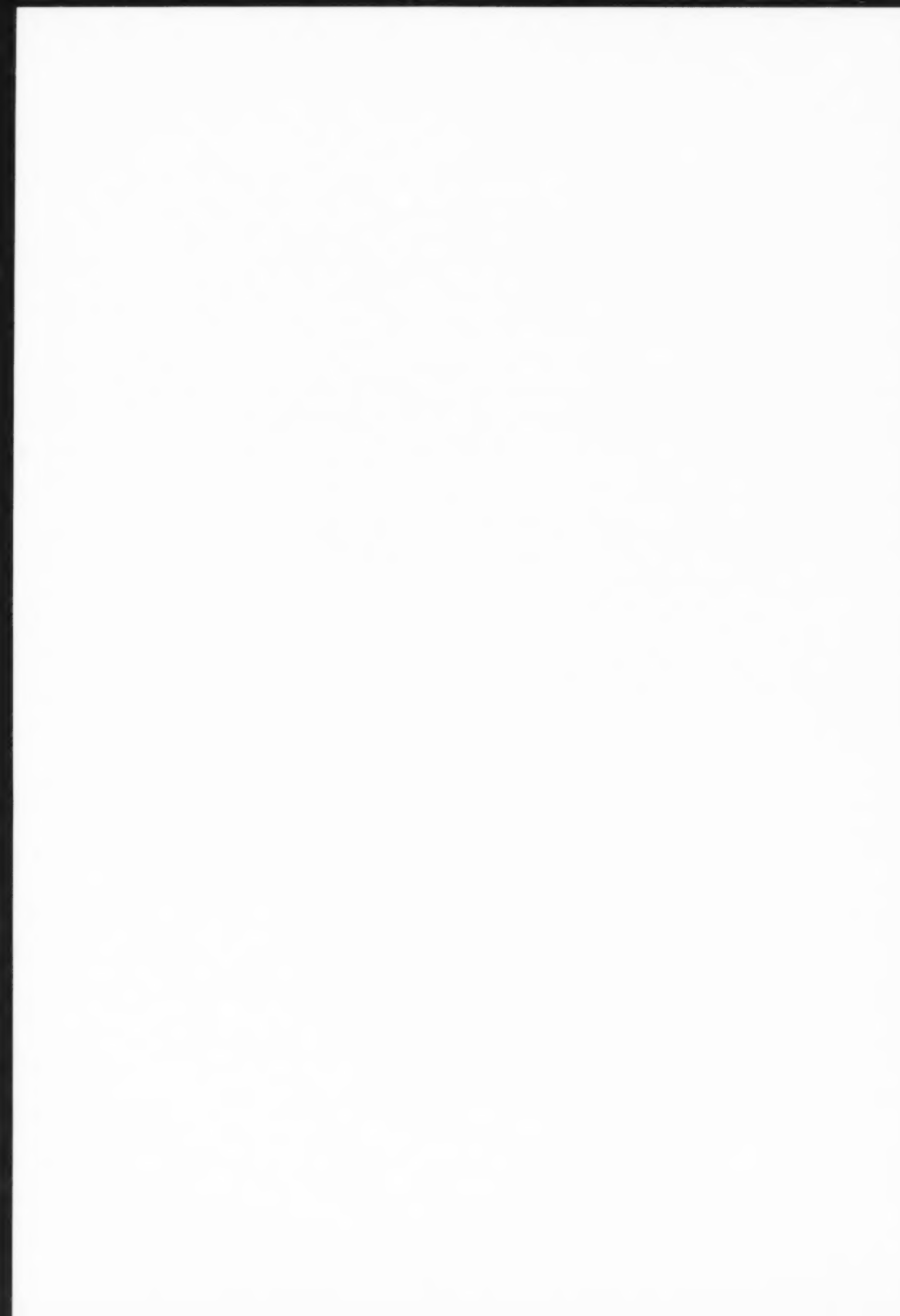
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Program Description: _____







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